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(54) MANUFACTURE OF SEMICONDUCTOR DEVICE

(57)Abstract:

PURPOSE: To obtain a sufficiently large signal strength even at the time of an automatic alignment by forming an alignment reference mark of a wafer side by a lower layer interconnection, and opening the region of the mark at the time of opening of a connection hole.

CONSTITUTION: An SiO₂ film 11 is formed on the surface of a semiconductor substrate 10, a lower layer interconnection 12 is formed, an alignment reference mark 13 at the time of formation of an upper layer interconnection pattern is simultaneously formed of lower layer interconnection metal. After the whole surface is coated with resist 14, a connection hole 15 and an opening 16 are formed at the resist 14, and the upper layer interconnection pattern on an Au film 17 and a pattern of resist 18 having an opening on the mark 13 are formed. Thus, the alignment mark in the case of positioning the upper layer interconnection pattern is formed not of the resist having a tapered opening but the lower layer interconnection metal on the substrate. Accordingly, a sharp sectional shape is obtained as a mark, and a sufficient alignment signal is obtained even by an automatic positioning system.

